

How to Save Money in Auto Repair

Easy Ways to Do Odd

AN EASY way to compress a Ford rear spring so that the bolt can be put in is shown in Fig. 1. You will need two pieces of timber 2 feet long and measuring 2 inches by 3 inches in cross section. The right end of the clamp, as shown in the illustration, can be held together by means of a bolt with an 8-inch bolt at the end which is used to compress the spring.

IF THE lower portion of an old valve stem is sawed off, the upper portion can be taped to the barrel of the tire pump, as shown in Fig. 2. It will provide a good place to carry a spare cap and valve insides, so that if the usual small box of valve insides is misplaced, you always will have an emergency one handy.

WHEN you unexpectedly find that you need chains to pull you up a steep, muddy hill and there are no tire chains in the toolbox, you can use spare links held on with rubber bands in the manner pictured in Fig. 3.

Naturally you will have to start the car carefully, but if reasonably heavy bands are used, the chains will stay in place long enough to get you out of trouble. The rubber bands do not mar the paint.

SOMETIMES it is very difficult for a person working alone to get the toggle bolt through the bushed hole in the spring boss, since frequently there is just enough twist in the spring to throw the hole in the boss out of line with the holes in the toggle straps.

By using a heavy monkey-wrench and your automobile jack, as in Fig. 4, the most obstinate and badly warped spring can be brought into line.

THE torque rod of a car may be strained and the threaded ends injured through improper application of a towline. If the towline is attached directly to an axle and the car is subjected to a jerk, it is very probable that damage will result.

In one instance the threaded end of the torque on a towing car was stripped from this cause. The replacement of the part was difficult because the car was of an obsolete model.

An ingenious repair, that was both serviceable and inexpensive, was applied to the stripped threads in the manner shown in Fig. 5.

The end of the torque rod was split lengthwise and the clamp that was placed over it closed up the threads so the threads fitted tightly.

TOO much vibration and pounding from road shocks will cause the best automobile radiator to spring a leak.



It is usually possible to tell at a glance when the radiator is loose, either by a slight push sideways or by watching the radiator closely when the car is in motion. When the radiator is loose on its supports, the shell of the radiator will move back and forth enough so that the motion can

Fig. 1—Easily constructed clamp that will aid in compressing rear spring for insertion of bolt

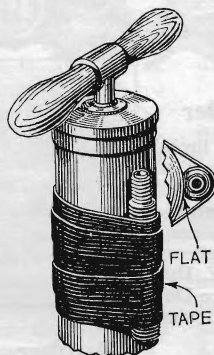
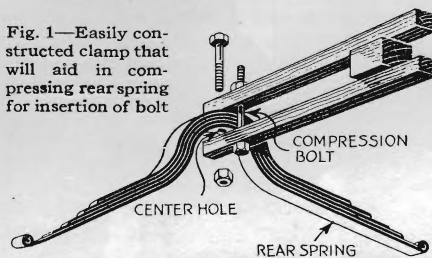


Fig. 2—Old valve stem taped to tire pump is a good place for an emergency valve

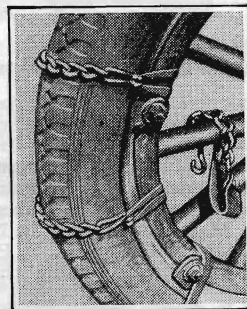


Fig. 3—Spare links held to the tire with rubber bands serve as emergency tire chains

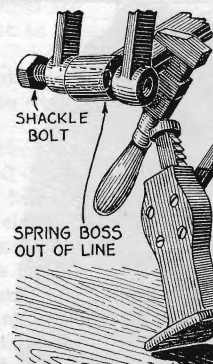


Fig. 4—An effective way of lining up spring boss with shackle bolt

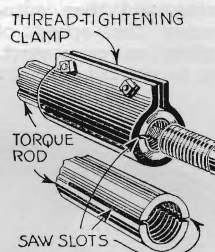


Fig. 5—A simple clamp device that can be used to repair a stripped torque rod

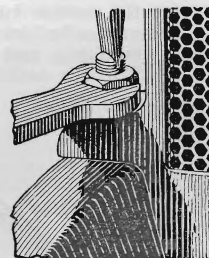


Fig. 6—A slot sawed in end of bolt for screwdriver for tightening radiator bolt

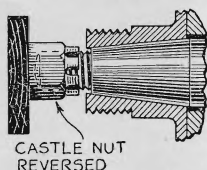


Fig. 7—An emergency method of removing Ford rear wheel is to tap reversed castellated nut

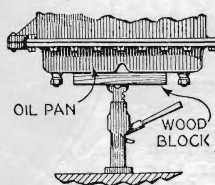


Fig. 8—How a jack can be used to aid in removing or replacing the oil pan of your auto engine

Jobs about Your Car

be seen readily from the driver's seat.

A number of cars are so constructed, however, that it is very difficult to tighten the radiator bolts, because the bolt head is not accessible with any ordinary wrench.

The illustration in Fig. 6 shows how this difficulty may be overcome. A slot is sawed in the end of the bolt with a hacksaw. This permits the bolt to be held stationary with a screwdriver while the nut is being turned down tight.

The same scheme also can be used, of course, with any other bolt on the car that is hard to get at.

WHILE a wheel puller is the proper tool with which to remove the rear wheel on a Ford, an emergency method is to screw off the castellated nut and screw it on again with the castellated end toward the wheel, as in Fig. 7. Be careful, of course, to see that the end of the shaft does not project through the nut.

One or two sharp blows on the end of the nut usually will serve to loosen up the tightest wheel, with no chance for injuring the threads on the end of the shaft.

IN REMOVING or replacing the oil pan of your automobile engine, you will find the work of getting the last bolts out or the first ones in much easier if you support the pan in place with the automobile jack and a piece of wood as shown in Fig. 8. Be careful not to apply too much pressure with the jack, as you may bend the pan out of shape or dent it badly.

MANUFACTURERS of automobile tires long have been in the

habit of recommending for the various sizes of tires air pressures that are somewhat higher than actually needed for best results. They figure that the average man will not be careful to test the pressure in his tires frequently, and since it is better from the standpoint of tire mileage to have a bit too much air than too little, the manufacturers' figures are justified.

However, this practice works to the disadvantage of the man who really takes pride in having everything about his car as it should be. He will keep his tires up to the recommended pressures and the result will be a hard-riding car. The solution of this problem is, of course, to scale down the manufacturers' recommendations about 10 per cent and then be sure to maintain this pressure.

It is well to keep in mind that the correct pressure for your rear tires is determined by the weight you are carrying in the car. Be sure to increase the pressure when you start a trip with the car loaded down with the full number of passengers.